## Goosepimples - What causes goose pimples?

#### Fact

- When we're cold or scared our brain sends a message to tiny
  muscles under each of the small hairs on our skin. The muscles
  work to pull the hair straight up instead of lying on its side.
- When the tiny hairs on our body stand straight up the skin at the base of each hair gets pulled up and that is called a goose pimple (or goose bump).
- We can't control when we get goose pimples or not because it's an automatic reaction or reflex.
- When it's hot and you need to cool down, little muscles at each hair relax. Your hair lies flat. Your sweat glands pump out body heat in the form of sweat. Our blood vessels get big to take more heat to the skin to get rid of it.
- When it is cold the hair muscle (arrector muscle) pulls the hair up. The duct to the sweat glands get small to conserve heat and our blood vessels get small to save heat.

## Do you know

- When animals with fur get scared their fur sometimes stands on end maybe as a way of making them look bigger and more frightening to other animals.
- One theory that scientists have is that a long, long time ago humans had more hair over their bodies. When that hair stood on end it might trap a layer of insulating air close to their bodies to keep from losing heat when it was cold.

## **Experiments you can do**

Do some goose pimple investigations!

What you need:
Friends or family to join in
Some ice cubes
Some cold water
A feather
A scary story

### What you do:

Experiment with your friends or family using the different things. Have someone read a scary story out loud. Run an ice cube up your bare arm. Tickle someone around the neck with a feather. Put your hand into cold water.

When do you get goose pimples?

# Other Investigations

Next time you hop out of the swimming pool or the sea, don't dry yourself straight away. Watch how long it takes for you get goose pimples. What's the day like – sunny, windy, cold, hot? How would these things make a difference?

### **Jokes**

Why did the duck wash its face everyday? It didn't want goose pimples. What did the goose say when she got scared. I've got goose bumps!

From Khayla

